

Before The
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

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OFFICE OF THE SECRETARY

In the Matter of)

Advanced Television Systems)
and Their Impact upon the)
Existing Television)
Broadcast Service)

MM Docket No. 87-268

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To: The Commission

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

COMMENTS OF SAN DIEGO TELEVISION, INC.

1. San Diego Television, Inc., the licensee of station KTTY, Channel 69, San Diego, California, offers these comments in response to the Second Further Notice of Proposed Rule Making released August 14, 1992.

2. Attached is an engineering statement prepared by Cohen, Dippell and Everist, P.C., a firm whose credentials have been long known by and fully established with the Commission. This firm has extensive background information and knowledge regarding the allocation of Channel 69 to San Diego as set forth in the statement.

3. We wish to stress the need to give special consideration to the San Diego market allocation structure in light of its location near the Mexican border and the impact of Mexican allocations and authorizations on USA stations in the San Diego market. In particular, we express concern about the existence of a substantial number of unused Mexican television channel assignments, including lower frequency assignments that do not have the "land mobile" interference problems associated with Channel 69, that potentially exist for activation in the San Diego market. While protection of land mobile needs, both above Channel 69 and in

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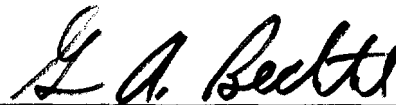
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the lower portions of the UHF band, is a matter of concern to this Commission, it is not of the same concern to the Mexican authorities.

4. For these reasons, and given the history of the allocation of Channel 69 (rather than Channel 27) detailed in the attached engineering statement, we ask the Commission to factor in the revised table of assignments the recapture and use of Channel 27 or an equivalent channel for allocation to San Diego. We also suggest that the Commission establish a regional working group of interested television broadcast parties to address the USA-Mexican aspect of the revised table of assignments for San Diego. Without such input, the Commission's hopes of a successful negotiation among the San Diego television broadcasters in dealing with the revised table of assignments probably have no likelihood of success. San Diego Television, Inc. is willing to participate in such a regional working group.

Respectfully submitted,



Gene A. Bechtel

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Counsel for San Diego
Television, Inc.

November 16, 1992

**ENGINEERING STATEMENT
ON BEHALF OF
SAN DIEGO TELEVISION, INC.
RE COMMENTS ON SECOND FURTHER NOTICE
OF PROPOSED RULE MAKING
MM DOCKET NO. 87-268**

NOVEMBER 1992

**COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.**

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

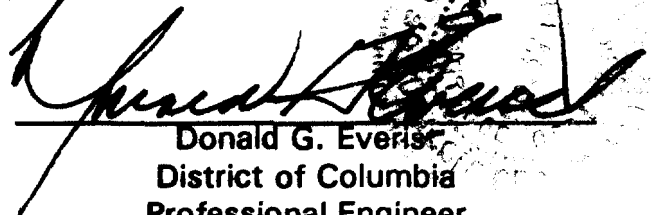
Donald G. Everist, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer, a Registered Professional Engineer in the District of Columbia, and is Secretary-Treasurer of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005;

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Donald G. Everist
District of Columbia
Professional Engineer
Registration No. 5714

Subscribed and sworn to before me this 13th day of November, 1992.


Notary Public

My Commission Expires: 2/28/93

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

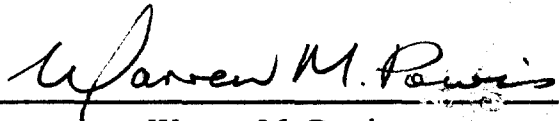
Warren M. Powis, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia and the State of Virginia, and a Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and,

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.



Warren M. Powis
District of Columbia
Professional Engineer
Registration No. 8339

Subscribed and sworn to before me this 13th day of November, 1992.


Notary Public

My Commission Expires: 2/28/93

INTRODUCTION

This engineering statement has been prepared on behalf of San Diego Television, Inc., licensee of Television Station KTTY, Channel 69, San Diego, California, in support of its comments on the Second Further Notice of Proposed Rule Making ("Notice") adopted July 16, 1992 (released August 14, 1992), in MM Docket No. 87-268. These comments address various items contained in the Notice as they impact KTTY and the San Diego area.

PRIOR HISTORY OF TELEVISION CHANNEL 69 ALLOTMENT IN THE SAN DIEGO AREA

In the 1970's this office provided engineering data in support of a request to the FCC to allot Channel 27 to San Diego as its fifth commercial service. This channel was chosen due to the inherently lower propagation losses associated with UHF propagation.^{1/} An appropriate request was made for this allocation. The Commission did not vigorously pursue this proposal and during the pendency of the proposed rule making, Channel 27 was requested by the Mexican Government. Although Mexico had a number of unused TV allotments in Tijuana, through a Commission oversight this additional unused Tijuana allotment was acquiesced to by the FCC. We are unaware of any attempt by the Commission to rectify this oversight. The only remaining channel that met FCC spacing criteria was Channel 69. A second request, this time for Channel 69 was filed and additional hurdles were put in the way of the Channel 69 allotment by the Land Mobile Communications Council. This office recommended to the Commission that it set standards for UHF television and Land Mobile operations. The Commission did not deem

^{1/}Particularly when compared to higher UHF channel such as Channel 69 which was ultimately assigned.

it appropriate. After considerable delay, Channel 69 was ultimately approved by the FCC. KTTY is the station licensed on this Channel 69 allotment.

Review of the FCC database shows San Diego has six operating stations on its six allotments; Tijuana has two operating stations on its seven allotments; and Tecate has no operating stations on its two allotments. In terms of the number of allotments for which there are operating stations, Mexico has received a disproportionate share of frequency allotments.

PROPAGATION LOSSES INCREASE WITH FREQUENCY

Typical urban receive sites do not exhibit fresnel clearance or even visual line-of-sight back to television transmitting antennas. Most paths are affected by one or more obstructing mediums such as:

- hills
- trees
- buildings

The total transmission path obstruction losses increase with increase in frequency from Channel 14 (mid-frequency of 473 MHz) to Channel 69 (mid-frequency of 803 MHz). In addition, at the receive site, the down-lead from the antenna exhibits increased losses with increase in frequency.

In order for any off-air ATV system to be competitive with other video media, it must be engineered in a manner that optimizes the availability to the general public for reception of a quality picture which is consistent over long periods of time without any significant drop-outs or annoying artifacts. This picture should be achievable without specialized effort or incurring

high expenses by the consumer. Such barriers to the general public may tend to hasten the transition away from off-air reception to other media such as cable television.

It was observed from the Commission's draft allotment plan that ATV channeling allotment priority appears to begin with Channel 69 and work downward in frequency. KTTY, therefore, submits that:

- the lowest available channels should be allotted for initial ATV use,
- after the transition period, television stations should be permitted to re-channel to better ATV channels, wherever possible,
- that the maximum allowable effective radiated power be a function of channel number in order that stations on higher channels receive predicted received service comparable to that from lower channel stations,
- the draft table with its emphasis of ATV allotments on the higher UHF frequencies within the U.S. most certainly will result in the allotment of lower ATV frequencies to Mexican stations and unused Mexican allotments.
- This could be a particular disadvantage to San Diego broadcasters if U.S.-Mexico trade agreements results in increased investment bringing into service unused Mexican allotments along the Mexican border.
- The Commission needs to be mindful of its past lapses in the international frequency coordination procedures with Mexico.
- The Commission should permit industry participation when it begins its discussion with Mexico on ATV matters.

FCC DRAFT TABLE OF ALLOTMENTS

In the Second Further Notice, the Commission included a draft table of ATV allotments.

For the San Diego market, the NTSC and ATV allotments are as follows:

| | <u>NTSC</u> | <u>ATV</u> |
|--------|-------------|------------|
| Site 1 | 15,39,51,69 | 9,55,63,65 |
| Site 2 | 8,10 | 16,25 |

KTTY recognizes that the FCC has a mammoth task in assigning a companion ATV channel to every licensed NTSC television station. KTTY has undertaken a review of the above television channelling in the San Diego area and urges the Commission to reconsider the ATV channelling proposals so that first-adjacent channels (NTSC to ATV or ATV to ATV), and image channels (ATV to NTSC) will not result. Since KTTY cannot be certain which ATV channel it will receive, it therefore is necessary to comment on all ATV frequencies proposed. From the above San Diego area channelling, potential conflicts result from three of the six ATV allotments as follows:

- Channel 9 at Site 1 will create potential interference to KFMB-TV (Channel 8) and KGTV (Channel 10) which operate from Site 2. In addition, the Channel 9 ATV allotment will potentially receive interference from both KFMB-TV and KGTV.
- Channel 16 ATV at Site 2 will create potential interference to KPBS (Channel 15) which operates from Site 1. Similarly, the Channel 16 ATV allotment will receive potential interference from KPBS.
- Channel 65 ATV at Site 1 will create image potential interference to KUSI, Channel 51 which is located at Site 2.

PROPAGATION ANOMALIES

Enhanced propagation of FM and television signals in San Diego-Los Angeles-Santa Barbara area is a well recognized phenomena. KTTY, therefore, urges the Commission give special recognition of this phenomena when optimizes its ATV channeling plan in order to reduce the incompatibilities resulting from co-channel ATV/NTSC and ATV/ATV allotments in this area.

U.S.-MEXICAN COORDINATION

The Commission should establish a separate industry task force^{2/} to assist in the coordination process in areas where U.S.-Mexican coordination on ATV frequencies is of vital interest. The Commission has encouraged television stations to negotiate with each other on ATV matters; however, KTTY feels that in view of the injustice it has received in the allocation process, that San Diego broadcasters cannot effectively coordinate ATV matters among only each other in view of the proximity of Mexico.

POST TRANSITION SCENARIOS

The best achievable ATV channeling plan for the transition period will be a compromise between ATV and NTSC service objectives. Following cessation of NTSC transmissions, the ultimate health of the ATV off-air industry will be heavily dependent on wide area, interference-free coverage. KTTY urges the Commission to enter into negotiations with Mexico for post-transition ATV allotments for future planning purposes and those allotments be made public prior to release of the revised ATV table. In addition, KTTY requests that the Commission give

^{2/}The Commission has historically authorized such committees. KTTY urges that the Commission should authorize such a committee immediately.

careful consideration to the southern California and Mexican propagation anomalies in forming its allotment plans and minimum distance spacing rules.

SUMMARY

KTTY supports the Commission's efforts to bring improved over the air television to the public. However, KTTY believes it has a unique perspective in the frequency selection process, the complexities of delivering a high quality signal on an upper UHF channel, the difficulties associated with operating on a frequency adjacent to land mobile frequencies, operating in an area where anomalous propagation occurs and being adjacent to the U.S.-Mexican border. KTTY urges the Commission to address these vital technical issues and open a forum where these unique technical considerations can be addressed.